



ALAMEDA POINT

Site Inspection on Eight Transfer Parcels, Alameda Point

Restoration Advisory Board (RAB)
Meeting
May 6, 2003

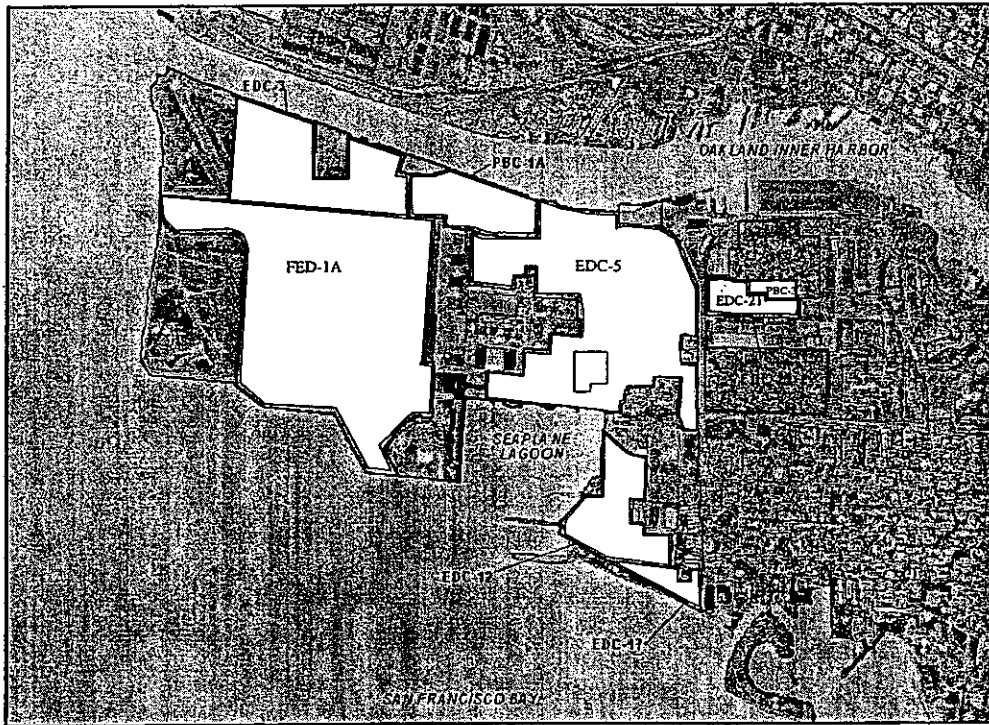
Eric Johansen, Bechtel National
Luciano Ocampo, SWDIV



ALAMEDA POINT

Introduction

- GOALS OF THE SITE INVESTIGATION:
 - Transfer of Parcels
 - Resolve issues on PAHs and AOCs
- PRELIMINARY DETERMINATIONS:
 - EDC-12, EDC-17 and PBC-1A: Recommended for No Further Action. Suitable for transfer. No significant risk due to PAHs – safe to humans and other receptors
 - PBC-3, EDC-5, EDC-3, EDC-21 and FED-1A: recommended for Further Actions under CERCLA program due to concern on PAHs and PCBs and Arsenic



ALAMEDA POINT

Agenda

- Overview
- SI Results and Transfer Parcel Status
- Site Background
 - Conceptual Site Model
 - Fill History
- Sampling Program Approach
- Analytical Results
- Risk Assessment
 - Objectives
 - Approach
 - Results



ALAMEDA POINT

Overview

- Historic sampling indicates that Alameda Point fill contain Polynuclear Aromatic Hydrocarbons (PAHs)
- The Navy has conducted a sampling program to assess the impacts of PAHs at non-CERCLA sites
- The Navy has prepared three Site Inspection Reports (SIs) that document PAH results, assess potential risk, and identify Areas of Concern (AOC) and parcels (or portions) ready for transfer.



ALAMEDA POINT

SI Reports

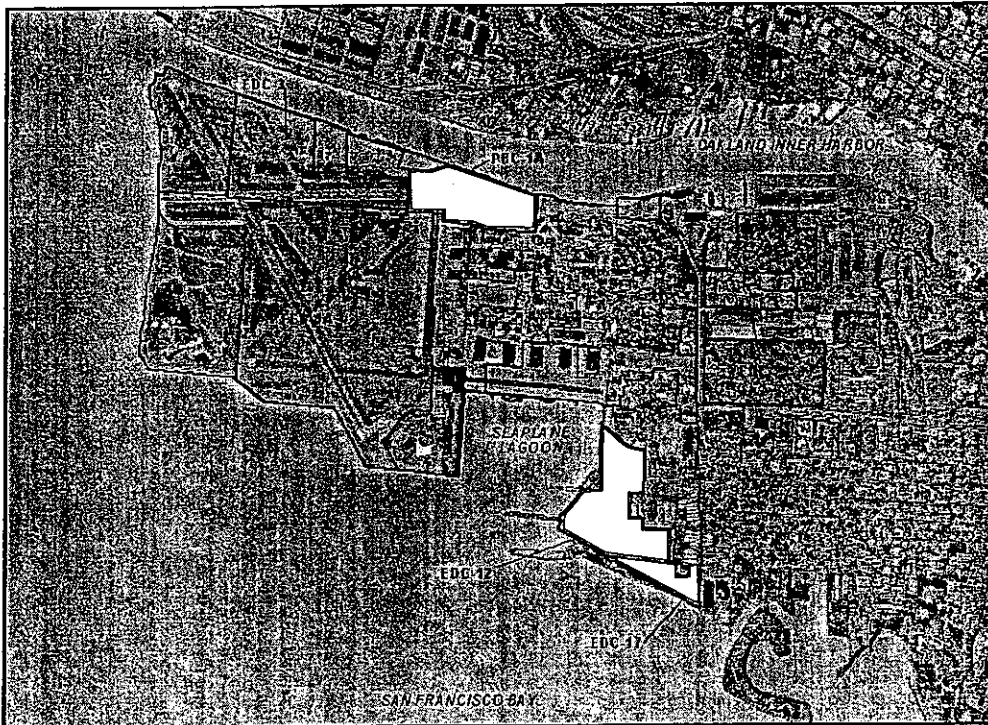
- Results presented in 3 SI Reports
 - EDC-3 and PBC-1A
 - EDC-5, EDC-12, EDC-17, EDC-21 and PBC-3
 - FED-1A
- All 3 Draft SI Reports submitted to regulatory agencies and RAB members in March 2003
- Navy requests comments May 2003



ALAMEDA POINT

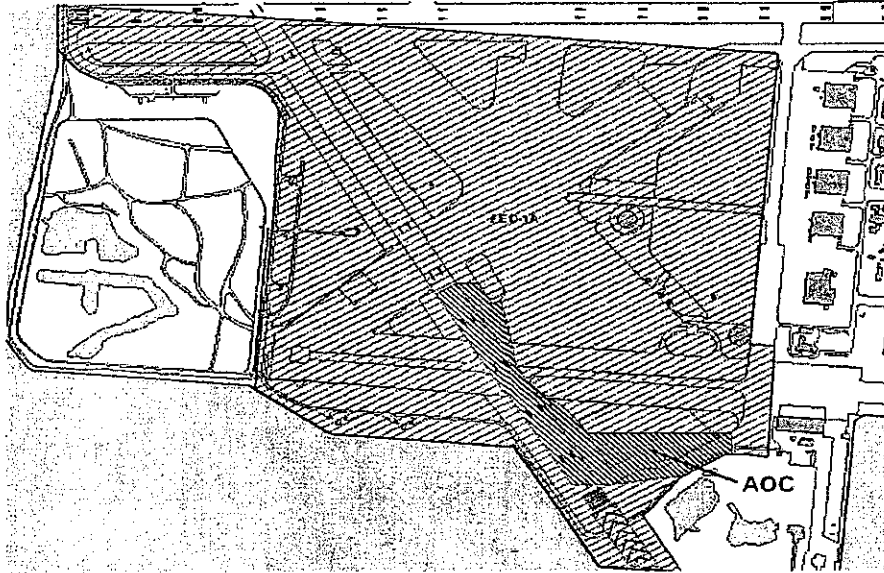
SI Results and Transfer Status

- Transfer Parcels proposed for transfer in SIs
 - PBC-1A
 - EDC-12
 - EDC-17
- Transfer Parcels (or portions) that require further action
 - FED-1A
 - EDC-3
 - EDC-5
 - PBC-3
 - EDC-21

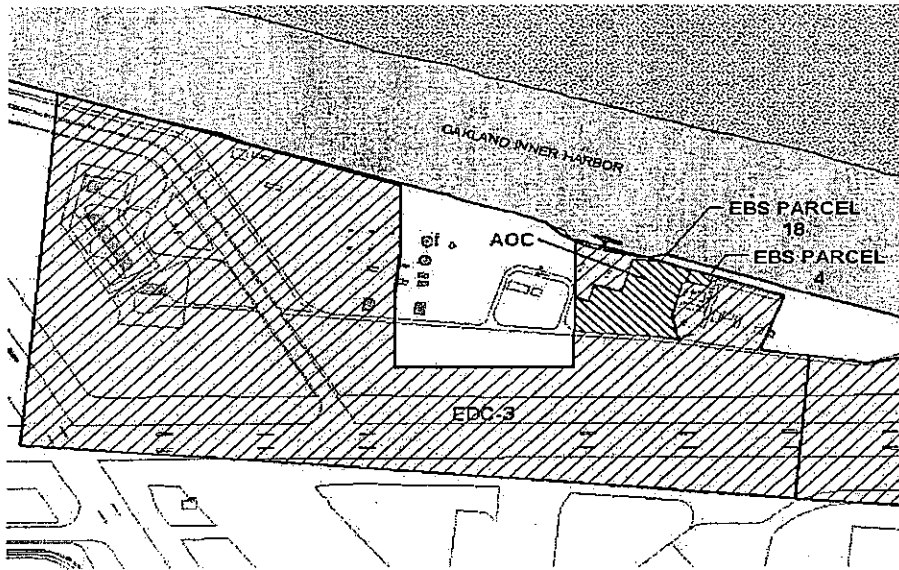




ALAMEDA POINT

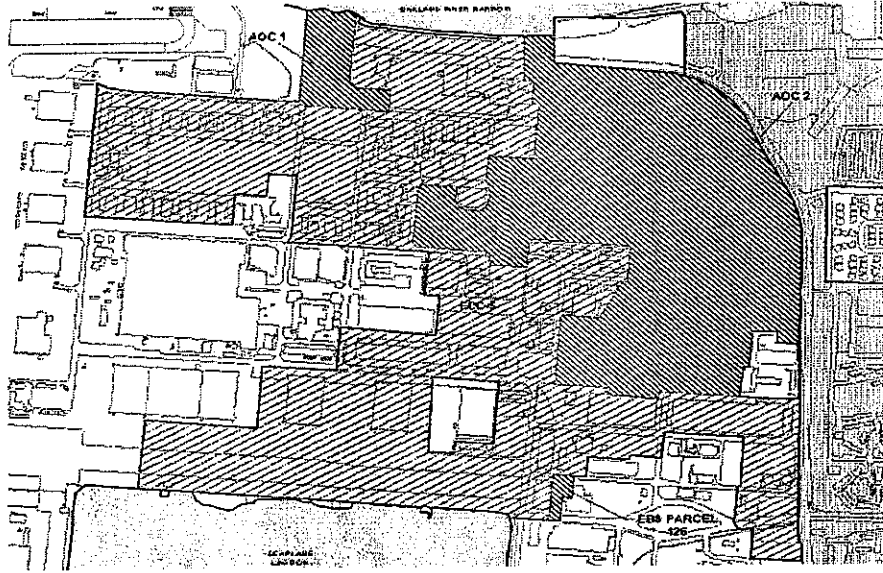


ALAMEDA POINT

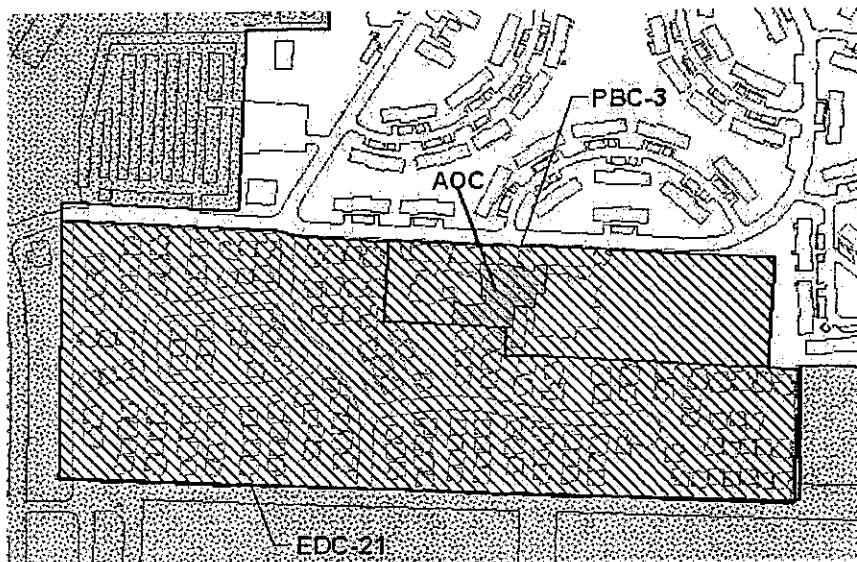




ALAMEDA POINT



ALAMEDA POINT





ALAMEDA POINT

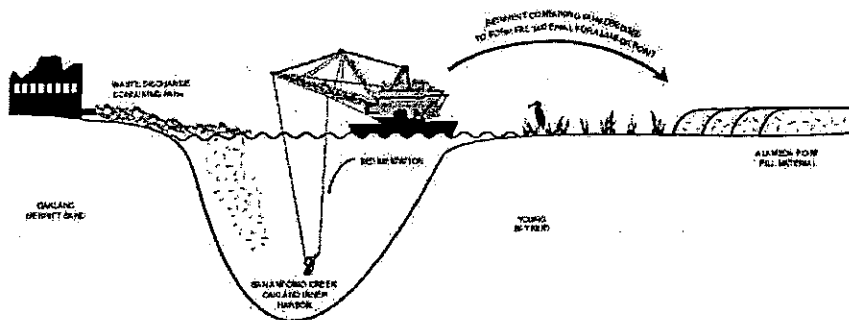
Site Background

- Dredging/Fill Events began in 1859 and continued through 1936
- Navy began filling Alameda Point in 1936 and continued up through 1973
- It is believed that the fill material used was impacted with PAHs from former industrial activities prior to Navy development (manufactured gas plants, refineries, asphalt industries)



ALAMEDA POINT

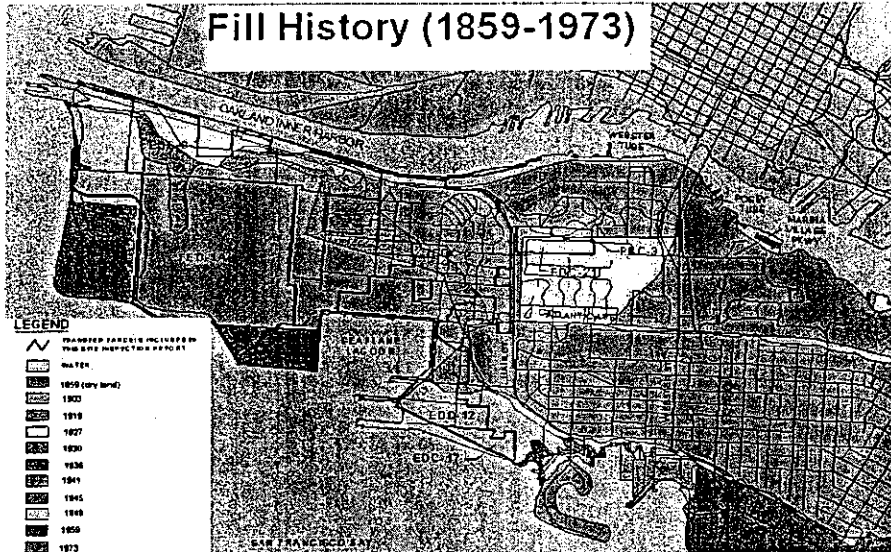
Conceptual Site Model



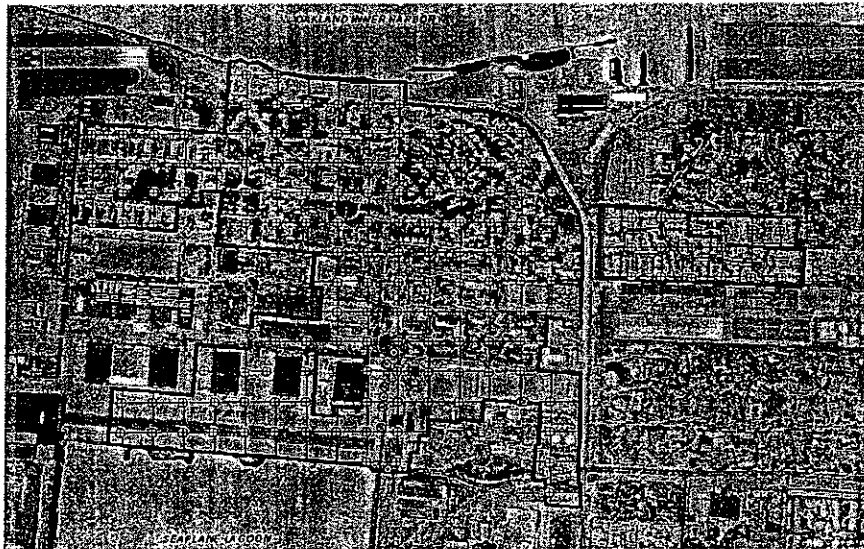


ALAMEDA POINT

Fill History (1859-1973)



ALAMEDA POINT





ALAMEDA POINT

Sampling Program Results

- Collected 1202 soil samples plus QC samples
- Analyzed samples by USEPA 8270 SIM
- Low detection limits (typically 5 ug/kg)
- 98 % of carcinogenic PAH data was usable
- Converted to B(a)P Equivalents (EQ)
- Elevated levels of PAHs in FED-1A and EDC-5



ALAMEDA POINT

Risk Assessment Objectives

- Determine whether potential human-health risks are above or below target risk management levels.
 - If risks are below target risk management levels, then property transfer with unrestricted use
 - If risk are above target risk managements levels, then additional evaluation or remediation may be warranted.



ALAMEDA POINT

Risk Assessment Approach

- Assess the human health risk for data from this SI (PAHs)
- Integrate the results of human health risk from the environmental baseline survey (EBS) (metals and organics)
- Qualitatively compare risk assessment results for both studies side-by-side to increase confidence in the risk management decisions



ALAMEDA POINT

Risk Assessment Results

- EDC-12 and EDC-17
 - B(a)P EQ are below 620 ug/kg
 - No risk from historic human-health risk calcs
 - Suitable for property transfer
- PBC-1A
 - Maximum B(a)P EQ was 650 ug/kg
 - No risk from historic human-health risk calcs
 - Suitable for property transfer



ALAMEDA POINT

Risk Assessment Results

- PBC-3
 - Maximum B(a)P EQ was 160 ug/kg
 - Historic B(a)P EQ results exceed 620 ug/kg
 - AOC identified between Miller School and Woodstock CDC
 - Groundwater known to contain VOCs and PAHs
 - Recommend site for further action under CERCLA



ALAMEDA POINT

Risk Assessment Results

- EDC-21
 - Maximum B(a)P EQ was 680 ug/kg
 - Remaining B(a)P EQ results below 620 ug/kg
 - Groundwater known to contain VOCs and PAHs
 - Recommend site for further action under CERCLA for Groundwater issues



ALAMEDA POINT

Risk Assessment Results

- EDC-5
 - 7 % (40 samples) exceed the human health screening criteria for B(a)P EQ of 620 ug/kg
 - Elevated PAHs correspond with 1930 fill event of the Posey Tube construction
 - EBS parcel 126 (arsenic)
 - Recommend further action for identified AOC and property transfer for remaining areas



ALAMEDA POINT

Risk Assessment Results

- EDC-3
 - B(a)P EQ data are below 620 ug/kg
 - EBS parcel 4 (Aroclor-1260)
 - EBS parcel 18 (Arsenic)
 - Recommend further action under CERCLA for EBS parcels 4 and 18
 - Remaining portions of EDC-3 are suitable for transfer



ALAMEDA POINT

Risk Assessment Results

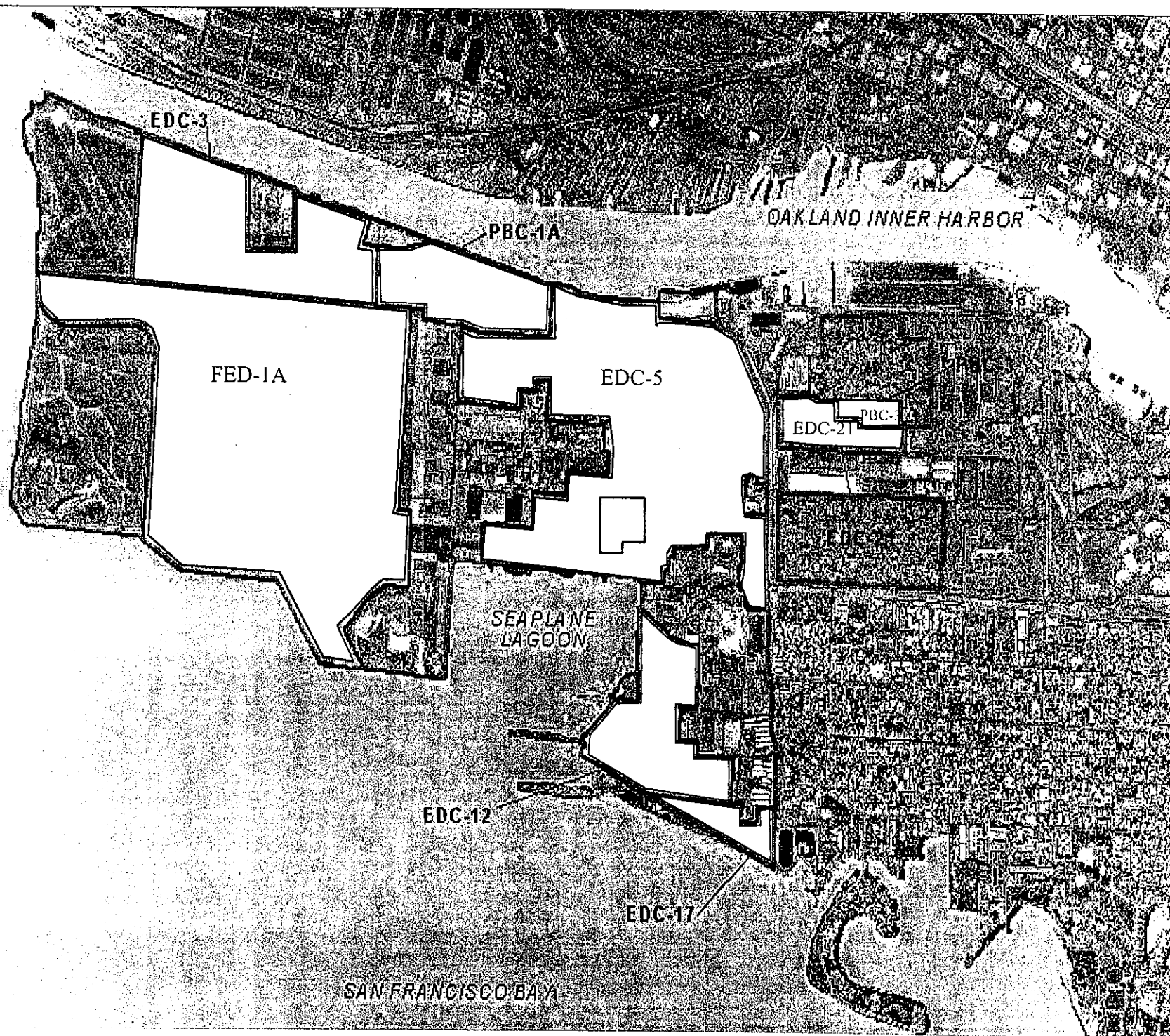
- FED-1A
 - 3 % (9 samples) exceed the human health screening criteria for B(a)P EQ of 620 ug/kg
 - AOC identified requires further action under CERCLA
 - Remaining portion of FED-1A is suitable for transfer



ALAMEDA POINT

Next Step

- Incorporate regulatory agency comments on the Draft SI reports
- Prepare and submit the Draft Final SI reports





ALAMEDA POINT

Fill History (1859-1973)

